

PLUS 4/26/04

Butler, Douglas

From: PLUS
Sent: Monday, April 19, 2004 11:27 AM
To: Butler, Douglas
Subject: PLUS Results for 09974739

Here are the PLUS search results for 09974739.

This search was prepared by the staff of the Scientific and Technical Information Center, SIRA. If you have questions or comments about this search, please reply via email to PLUS@uspto.gov.



09974739_QUAL.txt



09974739_LIST.txt



09974739_WEST.txt



09974739_EAST.txt



09974739.east



09974739_CLS.txt



09974739_CLSTITLES.txt



09974739_WDS.txt

xt

09974739_LIST

PLUS Search Results for S/N 09974739, Searched April 19, 2004

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

6084493	6470790	5378122
4628499	4579141	5379330
4932311	5323741	5394446
6360854	5449055	5397101
6513631	4297981	5400499
4907842	4313314	5426680
5526731	4329954	5439085
5655819	4498371	5465497
4848849	4565208	5474214
4861114	4784095	5513229
5239828	4838722	5533472
5290120	5404898	5537993
5477824	5492145	5542406
5614778	5520367	5666692
5618087	5562016	5685339
3669403	5775470	5716160
4179164	5826753	5722641
4078385	4071038	5746595
4330995	RE30507	5775672
4331364	4269182	5799486
4387934	4316486	5829385
4399736	4346558	5850760
4445671	4376464	5862945
4462300	4403741	5915416
4462571	4469134	5918844
4478390	4483465	5927448
4500074	4491160	6029949
4515042	4492252	6039122
4574654	4580762	6053831
4882976	4605837	6056058
4884492	4621703	6086339
4934248	4622829	6086279
4967643	4763616	6098742
4986727	4795128	6106560
5176017	4970732	6119697
5230134	4993860	6131608
5275086	4997131	6142175
5456137	5002468	6145590
5542315	5002469	6179268
5687765	5226566	6184766
5692812	5240030	6199636
5789719	5347554	6216560
5860448	5348190	6216560
5915927	5348197	6272947
5987887	5348198	6314730
6161380	5359905	6418967
6186042	5375458	6453891
6213566	5375746	6481337
6213566	5377241	6581903
6289872	5377942	6685451

09974739_EAST

(6084493
4628499
4932311
6360854
6513631
4907842
5526731
5655819
4848849
4861114
5239828
5290120
5477824
5614778
5618087
3669403
4179164
4078385
4330995
4331364
4387934
4399736
4445671
4462300
4462571
4478390
4500074
4515042
4574654
4882976
4884492
4934248
4967643
4986727
5176017
5230134
5275086
5456137
5542315
5687765
5692812
5789719
5860448
5915927
5987887
6161380
6186042
6213566
6213566
6289872) .pn.
(6470790
4579141
5323741
5449055
4297981
4313314
4329954
4498371
4565208

09974739_EAST

4784095
4838722
5404898
5492145
5520367
5562016
5775470
5826753
4071038
RE30507
4269182
4316486
4346558
4376464
4403741
4469134
4483465
4491160
4492252
4580762
4605837
4621703
4622829
4763616
4795128
4970732
4993860
4997131
5002468
5002469
5226566
5240030
5347554
5348190
5348197
5348198
5359905
5375458
5375746
5377241
5377942) .pn.
(5378122
5379330
5394446
5397101
5400499
5426680
5439085
5465497
5474214
5513229
5533472
5537993
5542406
5666692
5685339
5716160
5722641
5746595

09974739_EAST

5775672
5799486
5829385
5850760
5862945
5915416
5918844
5927448
6029949
6039122
6053831
6056058
6086339
6086279
6098742
6106560
6119697
6131608
6142175
6145590
6179268
6184766
6199636
6216560
6216560
6272947
6314730
6418967
6453891
6481337
6581903
6685451) .pn.

09974739_CLS
Most Frequently Occurring Classifications of Patents Returned
From A Search of 09974739 on April 19, 2004

Original Classifications

3 91/376R
3 188/266.6
3 254/270
3 376/260
2 74/606R
2 123/90.41
2 137/218
2 137/625.43
2 188/151R
2 222/401
2 303/9.75

Cross-Reference Classifications

4 60/547.1
4 137/596.17
4 188/349
4 251/129.14
3 91/376R
3 91/459
3 239/363
3 254/360
3 303/61
3 376/258
2 60/545
2 60/551
2 60/593
2 60/594
2 74/579R
2 91/44
2 92/240
2 92/33
2 166/75.15
2 188/290
2 210/237
2 222/209
2 222/325
2 239/360
2 239/373
2 251/129.08
2 251/287
2 303/10
2 303/2
2 303/9.62
2 376/313
2 417/555.2
2 475/82

Combined Classifications

6 91/376R
5 137/596.17
4 60/547.1
4 188/349
4 251/129.14
4 376/258

09974739_CLS

3 60/594
3 74/579R
3 91/459
3 123/90.41
3 137/218
3 188/266.6
3 222/401
3 239/363
3 254/270
3 254/360
3 303/61
3 303/9.62
3 376/260
3 417/555.2
2 60/487
2 60/545
2 60/548
2 60/551
2 60/562
2 60/593
2 74/606R
2 74/625
2 91/361
2 91/375A
2 91/44
2 92/187
2 92/240
2 92/33
2 123/568.24
2 137/625.43
2 137/627.5
2 166/75.15
2 180/429
2 188/151R
2 188/290
2 210/237
2 222/209
2 222/325
2 222/385
2 239/360
2 239/373
2 251/129.08
2 251/287
2 251/30.01
2 251/65
2 251/96
2 303/10
2 303/119.2
2 303/2
2 303/9.75
2 376/313
2 475/82

09974739_CLSTITLES

Titles of Most Frequently Occurring Classifications of Patents Returned
From A Search of 09974739 on April 19, 2004

- 6 91/376R (3 OR, 3 XR)
 Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
 91/358R WORKING MEMBER POSITION FEEDBACK TO MOTIVE
 FLUID CONTROL
 91/368 .Follower type
 91/374 ..Plural movable valve parts
 91/376R ...One movable part unitary with working member
- 5 137/596.17 (1 OR, 4 XR)
 Class 137 : FLUID HANDLING
 137/561R SYSTEMS
 137/596 .Supply and exhaust
 137/596.17 ..Motor
- 4 60/547.1 (0 OR, 4 XR)
 Class 060 : POWER PLANTS
 60/325 PRESSURE FLUID SOURCE AND MOTOR
 60/533 .Pulsator
 60/547.1 ..With control of or by a separate power fluid,
 etc.
- 4 188/349 (0 OR, 4 XR)
 Class 188 : BRAKES
 188/381 FRICTIONAL VIBRATION DAMPER
 188/151R .Fluid pressure
 188/152 ..Road vehicle
 188/349 ...With front rear brake apportioner
- 4 251/129.14 (0 OR, 4 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/129.01 ELECTRICALLY ACTUATED VALVE
 251/129.14 .Freely rotatable ball valve
- 4 376/258 (1 OR, 3 XR)
 Class 376 : INDUCED NUCLEAR REACTIONS: PROCESSES,
 SYSTEMS, AND ELEMENTS
 376/245 TESTING, SENSING, MEASURING, OR DETECTING A
 FISSION REACTOR CONDITION
 376/258 .Position detection
- 3 60/594 (1 OR, 2 XR)
 Class 060 : POWER PLANTS
 60/325 PRESSURE FLUID SOURCE AND MOTOR
 60/533 .Pulsator
 60/594 ..Having cam, or lever system driving master
- 3 74/579R (1 OR, 2 XR)
 Class 074 : MACHINE ELEMENT OR MECHANISM
 74/469 CONTROL LEVER AND LINKAGE SYSTEMS
 74/579R .Pitmans and connecting rods
- 3 91/459 (0 OR, 3 XR)
 Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
 91/418 WITH MOTIVE FLUID VALVE

09974739_CLSTITLES

91/459 .Electrically operated (275) (361)

3 123/90.41 (2 OR, 1 XR)

Class 123 : INTERNAL-COMBUSTION ENGINES

123/90.1 POPPET VALVE OPERATING MECHANISM

123/90.39 .Rocker

123/90.41 ..Individually fulcrumed

3 137/218 (2 OR, 1 XR)

Class 137 : FLUID HANDLING

137/215 BACK FLOW PREVENTION BY VACUUM BREAKING (E.G.,
ANTI-SIPHON DEVICES)

137/216 .Air vent in liquid flow line

137/217 ..Valved

137/218 ...With co-acting valve in liquid flow path

3 188/266.6 (3 OR, 0 XR)

Class 188 : BRAKES

188/266 INTERNAL-RESISTANCE MOTION RETARDER

188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder

188/266.2 ..Condition actuates valve or regulator

188/266.5 ...Of the pulsating or reciprocating type

188/266.6Side mounted

3 222/401 (2 OR, 1 XR)

Class 222 : DISPENSING

222/251 WITH DISCHARGE ASSISTANT (E.G., IMPELLER, PUMP,
CONVEYER, MOVABLE TRAP CHAMBER, ETC.)

222/394 .Fluid pressure

222/401 ..Container-mounted fluid pressure generating
pump or pulsator

3 239/363 (0 OR, 3 XR)

Class 239 : FLUID SPRINKLING, SPRAYING, AND DIFFUSING

239/302 INCLUDING SUPPLY HOLDER FOR MATERIAL

239/337 .Fluid pressure discharge means

239/340 ..Pressure reducer at holder outlet

239/355 ...Holder carried or mounted gas pump

239/363Flexible wall gas pump

3 254/270 (3 OR, 0 XR)

Class 254 : IMPLEMENTS OR APPARATUS FOR APPLYING PUSHING
OR PULLING FORCE

254/264 APPARATUS FOR HAULING OR HOISTING LOAD,
INCLUDING DRIVEN DEVICE WHICH CONTACTS AND PULLS ON CAB

LE

254/266 .Device includes rotatably driven, cable
contacting drum

254/270 ..Having cable contacted, supported, or
attached mechanism for generating control impulse to
retarding means or drive

3 254/360 (0 OR, 3 XR)

Class 254 : IMPLEMENTS OR APPARATUS FOR APPLYING PUSHING
OR PULLING FORCE

254/264 APPARATUS FOR HAULING OR HOISTING LOAD,
INCLUDING DRIVEN DEVICE WHICH CONTACTS AND PULLS ON CAB

LE

- 254/266 .Device includes rotatably driven, cable contacting drum
- 254/360 ..Drive includes expansible, noncombustible, fluid motor (e.g., air, steam)
- 3 303/61 (0 OR, 3 XR)
 - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 - 303/50 MOTORMAN'S VALVES
 - 303/61 .Intermittent
- 3 303/9.62 (1 OR, 2 XR)
 - Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 - 303/5 MULTIPLE FLUID-RECEIVING DEVICES
 - 303/6.01 .Multiple motors
 - 303/9.62 ..Apportioning control
- 3 376/260 (3 OR, 0 XR)
 - Class 376 : INDUCED NUCLEAR REACTIONS: PROCESSES, SYSTEMS, AND ELEMENTS
 - 376/260 HANDLING OF FISSION REACTOR COMPONENT STRUCTURE WITHIN REACTOR SYSTEM
- 3 417/555.2 (1 OR, 2 XR)
 - Class 417 : PUMPS
 - 417/437 EXPANSIBLE CHAMBER TYPE
 - 417/555.1 .Fluid serially moved to opposite side of pumping member
 - 417/555.2 ..Well swabs
- 2 60/487 (1 OR, 1 XR)
 - Class 060 : POWER PLANTS
 - 60/325 PRESSURE FLUID SOURCE AND MOTOR
 - 60/487 .Input pump and rotary output motor system having displacement varying type of direction or speed selector
- 2 60/545 (0 OR, 2 XR)
 - Class 060 : POWER PLANTS
 - 60/325 PRESSURE FLUID SOURCE AND MOTOR
 - 60/533 .Pulsator
 - 60/545 ..Having electricity or magnetically operated structure
- 2 60/548 (1 OR, 1 XR)
 - Class 060 : POWER PLANTS
 - 60/325 PRESSURE FLUID SOURCE AND MOTOR
 - 60/533 .Pulsator
 - 60/547.1 ..With control of or by a separate power fluid, etc.
 - 60/548 ...Flow in recirculating circuit controlled
- 2 60/551 (0 OR, 2 XR)
 - Class 060 : POWER PLANTS
 - 60/325 PRESSURE FLUID SOURCE AND MOTOR
 - 60/533 .Pulsator
 - 60/547.1 ..With control of or by a separate power fluid, etc.

09974739_CLSTITLES

- 60/551 ...Manual master and controller of motor driven
master actuated by separate linkages to a common operatin
g
lever
- 2 60/562 (1 OR, 1 XR)
Class 060 : POWER PLANTS
60/325 PRESSURE FLUID SOURCE AND MOTOR
60/533 .Pulsator
60/562 ..Master piston of one pulsator circuit drives
master piston of a parallel circuit through a resilient,
fluid or lost motion connection
- 2 60/593 (0 OR, 2 XR)
Class 060 : POWER PLANTS
60/325 PRESSURE FLUID SOURCE AND MOTOR
60/533 .Pulsator
60/593 ..Having fluid motor driving piston of master
unit
- 2 74/606R (2 OR, 0 XR)
Class 074 : MACHINE ELEMENT OR MECHANISM
74/469 CONTROL LEVER AND LINKAGE SYSTEMS
74/606R .Gear casings
- 2 74/625 (1 OR, 1 XR)
Class 074 : MACHINE ELEMENT OR MECHANISM
74/625 ALTERNATE MANUAL OR POWER OPERATORS
- 2 91/361 (1 OR, 1 XR)
Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
91/358R WORKING MEMBER POSITION FEEDBACK TO MOTIVE
FLUID CONTROL
91/361 .Electrical input and feedback signal means
(459)
- 2 91/375A (1 OR, 1 XR)
Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
91/358R WORKING MEMBER POSITION FEEDBACK TO MOTIVE
FLUID CONTROL
91/368 .Follower type
91/374 ..Plural movable valve parts
91/375R ...Valve part moves about an axis
91/375A Torsion bar
- 2 91/44 (0 OR, 2 XR)
Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
91/41 WITH CORRELATED CONTROL OF MOTIVE FLUID AND
LOCKING MEANS
91/44 .Sequential operation of locking means and
motive fluid control
- 2 92/187 (1 OR, 1 XR)
Class 092 : EXPANSIBLE CHAMBER DEVICES
92/172 PISTON
92/187 .With separable means for pivotally mounting
connecting rod to piston
- 2 92/240 (0 OR, 2 XR)

09974739_CLSTITLES

- Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/172 PISTON
 92/240 .Side wall portion includes peripheral axially
 extending flexible lip
- 2 92/33 (0 OR, 2 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/31 RECTILINEARLY MOVING WORKING MEMBER AND COAXIAL
 OR PARALLEL ELEMENT SLIDABLY INTERENGAGED FOR RELATIVE
 ROTARY MOVEMENT
 92/33 .Element extends through working member portion
- 2 123/568.24 (1 OR, 1 XR)
 Class 123 : INTERNAL-COMBUSTION ENGINES
 123/434 CHARGE FORMING DEVICE (E.G., POLLUTION CONTROL)
- 123/568.11 .Exhaust gas used with the combustible mixture
 (e.g., emission control Exhaust Gas Recirculation (EGR
) valve)
 123/568.21 ..Having electrically actuated control means
 123/568.23 ...Having rotary actuator control of EGR valve
 123/568.24Electrical rotary actuator rotates the EGR
 valve
- 2 137/625.43 (2 OR, 0 XR)
 Class 137 : FLUID HANDLING
 137/561R SYSTEMS
 137/625 .Multi-way valve unit
 137/625.43 ..Four port reversing valves
- 2 137/627.5 (1 OR, 1 XR)
 Class 137 : FLUID HANDLING
 137/561R SYSTEMS
 137/627.5 .Sequentially closing and opening alternately
 seating flow controllers
- 2 166/75.15 (0 OR, 2 XR)
 Class 166 : WELLS
 166/75.11 ABOVE GROUND APPARATUS
 166/75.15 .With means for injecting solid or particulate
 material into the well
- 2 180/429 (1 OR, 1 XR)
 Class 180 : MOTOR VEHICLES
 180/400 STEERING GEAR
 180/417 .With fluid power assist
 180/429 ..Having rotary working member
- 2 188/151R (2 OR, 0 XR)
 Class 188 : BRAKES
 188/381 FRICTIONAL VIBRATION DAMPER
 188/151R .Fluid pressure
- 2 188/290 (0 OR, 2 XR)
 Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER

09974739_CLSTITLES

- 188/290 .Using a rotary-type fluid damper
- 2 210/237 (0 OR, 2 XR)
 Class 210 : LIQUID PURIFICATION OR SEPARATION
 210/232 WITH REPAIR OR ASSEMBLING MEANS
 210/237 .Hoist or handle means
- 2 222/209 (0 OR, 2 XR)
 Class 222 : DISPENSING
 222/206 RESILIENT WALL
 222/209 .Fluid pressure generating pump or pulsator
 and/or removable flexible wall closures
- 2 222/325 (0 OR, 2 XR)
 Class 222 : DISPENSING
 222/251 WITH DISCHARGE ASSISTANT (E.G., IMPELLER, PUMP,
 CONVEYER, MOVABLE TRAP CHAMBER, ETC.)
 222/325 .Insertable cartridge or removable container
- 2 222/385 (1 OR, 1 XR)
 Class 222 : DISPENSING
 222/251 WITH DISCHARGE ASSISTANT (E.G., IMPELLER, PUMP,
 CONVEYER, MOVABLE TRAP CHAMBER, ETC.)
 222/372 .With material supply container and discharge
 assistant with casing (e.g., supply container and pump)
- 222/383.1 ..Container-mounted pump
 222/385 ...Pump or pulsator casing within supply
 container
- 2 239/360 (0 OR, 2 XR)
 Class 239 : FLUID SPRINKLING, SPRAYING, AND DIFFUSING
 239/302 INCLUDING SUPPLY HOLDER FOR MATERIAL
 239/337 .Fluid pressure discharge means
 239/340 ..Pressure reducer at holder outlet
 239/355 ...Holder carried or mounted gas pump
 239/360Pump casing within supply holder
- 2 239/373 (0 OR, 2 XR)
 Class 239 : FLUID SPRINKLING, SPRAYING, AND DIFFUSING
 239/302 INCLUDING SUPPLY HOLDER FOR MATERIAL
 239/337 .Fluid pressure discharge means
 239/373 ..Means to pressurize contents of holder
- 2 251/129.08 (0 OR, 2 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/129.01 ELECTRICALLY ACTUATED VALVE
 251/129.08 .Having means to produce proportional flow
- 2 251/287 (0 OR, 2 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/284 LIMIT STOP
 251/286 .Rotary valve
 251/287 ..Stop element on head
- 2 251/30.01 (1 OR, 1 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/12 FLUID ACTUATED OR RETARDED
 251/25 .Pilot or servo type motor

09974739_CLSTITLES

- 251/30.01 ..Electrically actuated pilot valve
- 2 251/65 (1 OR, 1 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/65 PERMANENT OR CONSTANTLY ENERGIZED MAGNET ACTUATOR
- 2 251/96 (1 OR, 1 XR)
 Class 251 : VALVES AND VALVE ACTUATION
 251/89 WITH MEANS FOR BLOCKING OR DISABLING ACTUATOR
- 251/95 ..Released by non-valving actuator motion
 251/96 ..Linear reciprocation of rotary handle
- 2 303/10 (0 OR, 2 XR)
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 303/10 WITH PUMP
- 2 303/119.2 (1 OR, 1 XR)
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 303/121 SPEED-CONTROLLED
 303/113.1 ..Having a valve system responsive to a wheel lock signal
 303/119.1 ..System controlled by solenoid valve
 303/119.2 ...System solenoid valve detail
- 2 303/2 (0 OR, 2 XR)
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 303/2 MULTIPLE SYSTEMS
- 2 303/9.75 (2 OR, 0 XR)
 Class 303 : FLUID-PRESSURE AND ANALOGOUS BRAKE SYSTEMS
 303/5 MULTIPLE FLUID-RECEIVING DEVICES
 303/6.01 ..Multiple motors
 303/9.62 ..Apportioning control
 303/9.75 ...Detail
- 2 376/313 (0 OR, 2 XR)
 Class 376 : INDUCED NUCLEAR REACTIONS: PROCESSES, SYSTEMS, AND ELEMENTS
 376/308 FISSION REACTOR MATERIAL (INCLUDING REACTION PRODUCTS) TREATMENT
 376/310 ..Impurity removal
 376/313 ..By filters, ion exchangers, or absorbers
- 2 475/82 (0 OR, 2 XR)
 Class 475 : PLANETARY GEAR TRANSMISSION SYSTEMS OR COMPONENTS
 475/31 FLUID DRIVE OR CONTROL OF PLANETARY GEARING
 475/72 ..Fluid pump and motor in one of plural paths to or from planetary gearing
 475/80 ..Plural speed ranges
 475/81 ...With constant speed ratio between input and one fluid unit
 475/82Having single planet carrier

L Number	Hits	Search Text	DB	Time stamp
----------	------	-------------	----	------------

EAST 4/26/04

1	148	("6084493" "4628499" "4932311" "6360854" "6513631" "4907842" "5526731" "5655819" "4848849" "4861114" "5239828" "5290120" "5477824" "5614778" "5618087" "3669403" "4179164" "4078385" "4330995" "4331364" "4387934" "4399736" "4445671" "4462300" "4462571" "4478390" "4500074" "4515042" "4574654" "4882976" "4884492" "4934248" "4967643" "4986727" "5176017" "5230134" "5275086" "5456137" "5542315" "5687765" "5692812" "5789719" "5860448" "5915927" "5987887" "6161380" "6186042" "6213566" "6213566" "6289872").pn. ("6470790" "4579141" "5323741" "5449055" "4297981" "4313314" "4329954" "4498371" "4565208" "4784095" "4838722" "5404898" "5492145" "5520367" "5562016" "5775470" "5826753" "4071038" "4362850" "4669182" "4316486" "4346558"	USPAT; US-PGPUB	2004/04/26 06:03
Search History 4/26/04 8:52:50 AM Page 2 C:\APPS\east\workspaces\148\148.wsp 4316486 "4346558"				